# Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

# ENVIRONMENTAL ASSESSMENT

For Routine Actions with Limited Environmental Impact

Note: Instructions to DNRC staff for preparing this EA can be found at: http://www.dnrc.state.mt.us/eis\_ea.html

# Part I. Proposed Action Description

1. Applicant/Contact name and address: Edward M. Ryberg PO Box 230

West Yellowstone, Mt 59758

- 2. Type of action: Application For Beneficial Water Use Permit # 30023458-41F
- 3. *Water source name*: Groundwater well
- 4. Location affected by project: SESENENW Sec 10 T13S R4E, Lot # 2, Minor Subdivision # 226, Gallatin County.
- 5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The applicant proposes to pump 15 GPM, up to 3.0 acre-foot of water for domestic, and irrigation on 1 acre. This well is located within the Yellowstone Controlled Groundwater Area. The National Park Service was notified. If they do not object, a permit will be issued.
- 6. Agencies consulted during preparation of the Environmental Assessment: Montana Natural Heritage Program, Montana Dept. of Fish, Wildlife & Parks, Montana Dept. of Environmental Quality, Gallatin County Planning Office, State Historic Preservation Office, National Park Service.

(include agencies with overlapping jurisdiction)

# Part II. Environmental Review

1. Environmental Impact Checklist:

# PHYSICAL ENVIRONMENT

### WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: The source of water is a groundwater well. Not identified by DFWP.

<u>Water quality</u> - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: The source of water is groundwater, not on the DEQ list.

<u>Groundwater</u> - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

*Determination*: The well is 172 feet deep with several different clay layers. With no perforations the requested 15 GPM should have negligible affect on the surface flows in the South Fork of the Madison River.

<u>DIVERSION WORKS</u> - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: Water will be diverted using a 1 HP pump. No impact to existing resources.

### UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

<u>Endangered and threatened species</u> - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

*Determination*: The Montana Natural Heritage Program was contacted. The following species may be found within Sec 10 T13S R4E. The Short-seeded Water-wort, a mayfly, Brewer's Sparrow and the Trumpeter Swan may be found near this location. The Canada Lynx, and the Brown Bear (Ursus Arctos) may also pass through this area. These species should not be impacted by another house in this area.

<u>Wetlands</u> - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

*Determination*: This well was not drilled in a wetland, and will have no impact on existing wetlands.

<u>**Ponds**</u> - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

*Determination*: This project does not involve a pond. No impact to existing resources.

<u>GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE</u> - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

*Determination*: This new well & house should not impact soil quality, alter soil stability, or moisture content. There is no saline seep in this area.

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

*Determination*: A small area was disturbed by drilling the well, and will be disturbed when the house is built. These disturbed areas may likely be reseded.

<u>AIR QUALITY</u> - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: There should be no significant impact to air quality from this well.

<u>HISTORICAL AND ARCHEOLOGICAL SITES</u> - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

*Determination*: SHPO has been contacted. They stated that any cultural properties that may have been in the area have already been impacted. A cultural resource inventory is unwarranted.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: No additional impacts on other environmental resources were identified.

# **HUMAN ENVIRONMENT**

<u>LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</u> - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

*Determination*: The Gallatin County Planning Board has no restrictions against drilling new wells in Hebgen Lake area.

<u>ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES</u> - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

*Determination*: This area is private property, with no access to public recreational or wilderness activities. No impact is expected.

**HUMAN HEALTH** - Assess whether the proposed project impacts on human health.

*Determination*: No impact on human health is expected on human health.

<u>PRIVATE PROPERTY</u> - Assess whether there are any government regulatory impacts on private property rights.

Yes\_\_\_ No\_\_X\_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: Private property rights are not impacted by this proposed action.

<u>OTHER HUMAN ENVIRONMENTAL ISSUES</u> - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

### Impacts on:

- (a) <u>Cultural uniqueness and diversity</u>? No significant impact
- (b) Local and state tax base and tax revenues? No significant impact
- (c) Existing land uses? No significant impact
- (d) Quantity and distribution of employment? No significant impact
- (e) <u>Distribution and density of population and housing</u>? No significant impact
- (f) Demands for government services? No significant impact
- (g) Industrial and commercial activity? No significant impact
- (k) Utilities? No significant impact
- (i) Transportation? No significant impact
- (j) <u>Safety</u>? No significant impact
- (k) Other appropriate social and economic circumstances? No significant impact
- 11. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts No secondary impacts have been identified

Cumulative Impacts No cumulative impacts have been identified

- **3. Describe any mitigation/stipulation measures:** Mitigation or stipulations are not planned at this time.
- 11. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to

*consider:* If the applicant is not allowed to drill a well, they will not have water for their house. It may be possible to bring in water in a tank truck.

# PART III. Conclusion

- 1. Preferred Alternative Drill a well for household purposes.
- 2 Comments and Responses None received to date.
- 1. Finding:

Yes\_\_\_\_ No X\_\_\_\_ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: Significant impacts have not been identified. An EIS is not required for this action.

*Name of person(s) responsible for preparation of EA:* 

Name: Jan R. Mack

Title: Water Resources Specialist

Date: August 21, 2006